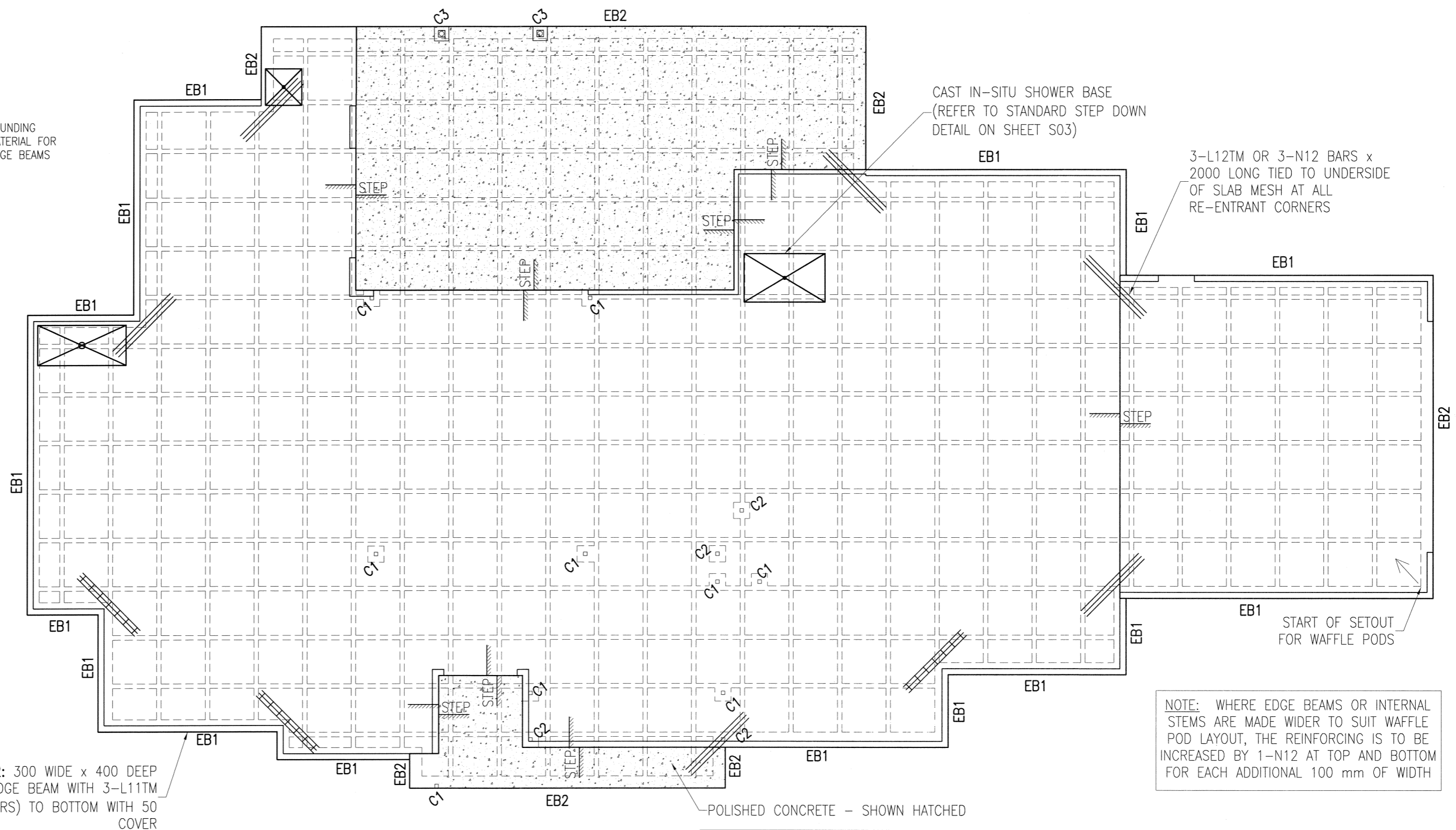


BORE HOLES 1 TO 3
BORE LOGS



THIS SLAB HAS BEEN DESIGNED FOR A CLASS 'S' CLASSIFICATION. REFER SOIL REPORT NO 1409038 BY SHANE MUIR CONSULTING ENGINEERS PTY LTD DATED 22nd SEPTEMBER 2014

EB1-EB2: 300 WIDE x 400 DEEP CONCRETE EDGE BEAM WITH 3-L11TM (OR 3-N12 BARS) TO BOTTOM WITH 50 COVER

NOTE: WHERE EDGE BEAMS OR INTERNAL STEMS ARE MADE WIDER TO SUIT WAFFLE POD LAYOUT, THE REINFORCING IS TO BE INCREASED BY 1-N12 AT TOP AND BOTTOM FOR EACH ADDITIONAL 100 mm OF WIDTH

NOTE: SHRINKAGE CRACKING CAN BE EXPECTED IN CONCRETE FLOORS. CONCRETE FLOORS CAN ALSO BE DAMAGED BY SWELLING OF REACTIVE CLAYS OR SETTLEMENT OF FILL (REFER GENERAL NOTES ITEM 20)

SITE DRAINAGE NOTES -

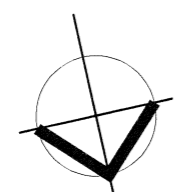
- THE EDGE BEAMS ARE TO BE PROTECTED AGAINST POSSIBLE EROSION OF FOUNDING SOIL UNDER
- WATER RUN-OFF SHALL BE COLLECTED AND CHANNELLED AWAY FROM THE BUILDING DURING CONSTRUCTION
- THE FINISHED SURFACE ADJACENT TO THE BUILDING SHALL BE MADE IMPERVIOUS AND GRADED AWAY FOR 50 mm OVER 1000 mm
- SURFACE DRAINS ARE TO BE PROVIDED TO PROTECT BUILDING FOUNDATIONS FROM SURFACE WATER FLOWING DOWN FROM UPHILL
- DRAINS ATTACHED TO OR EMERGING FROM UNDERNEATH THE BUILDING SHALL INCORPORATE FLEXIBLE JOINTS IMMEDIATELY OUTSIDE THE FOOTINGS AND COMMENCING WITHIN 1000 mm OF THE BUILDING PERIMETER
- SEE SHEET S04 FOR ADDITIONAL DRAINAGE NOTES

WAFFLE SLAB PLAN

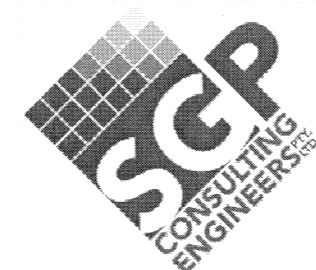
SCALE 1:100
100 mm THICK S32 PART POLISHED CONCRETE SLAB WITH 1 LAYER SL92 MESH TOP WITH 20 CLEAR COVER
PROVIDE ADDITIONAL THICKNESS TO CONCRETE SLAB DEPTH TO ALLOW FOR POLISHING
OVER 0.2 mm POLYTHENE VAPOUR BARRIER WITH 50 mm MINIMUM COMPACTED SAND FILL

REFER TO DRAWING S08 FOR GENERAL NOTES FOR CONCRETE SLABS AND FOOTINGS

CONSTRUCTION ISSUE



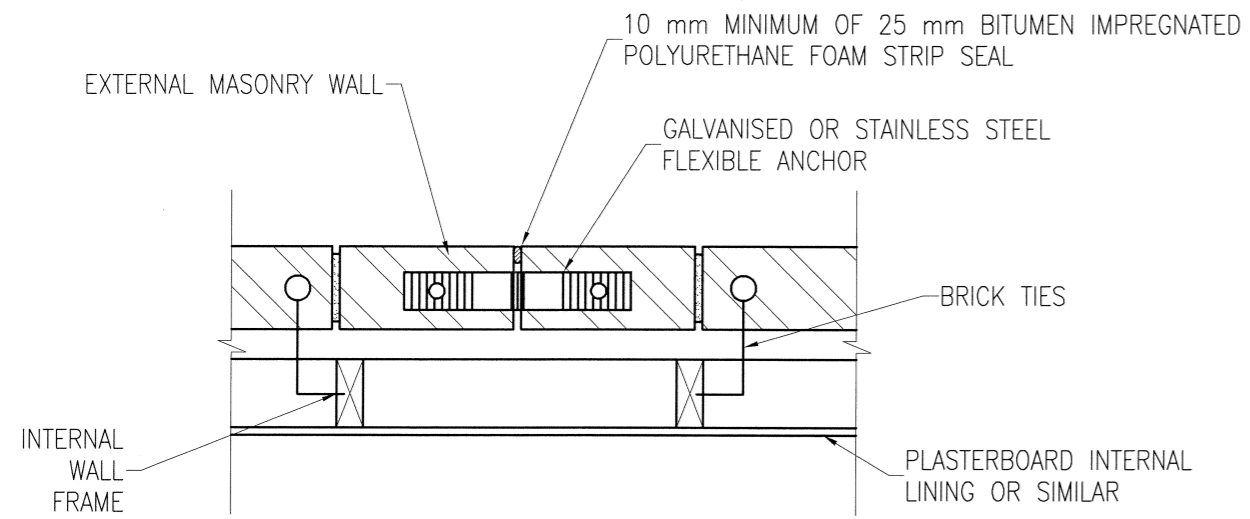
| No. | DATE | REMARKS |
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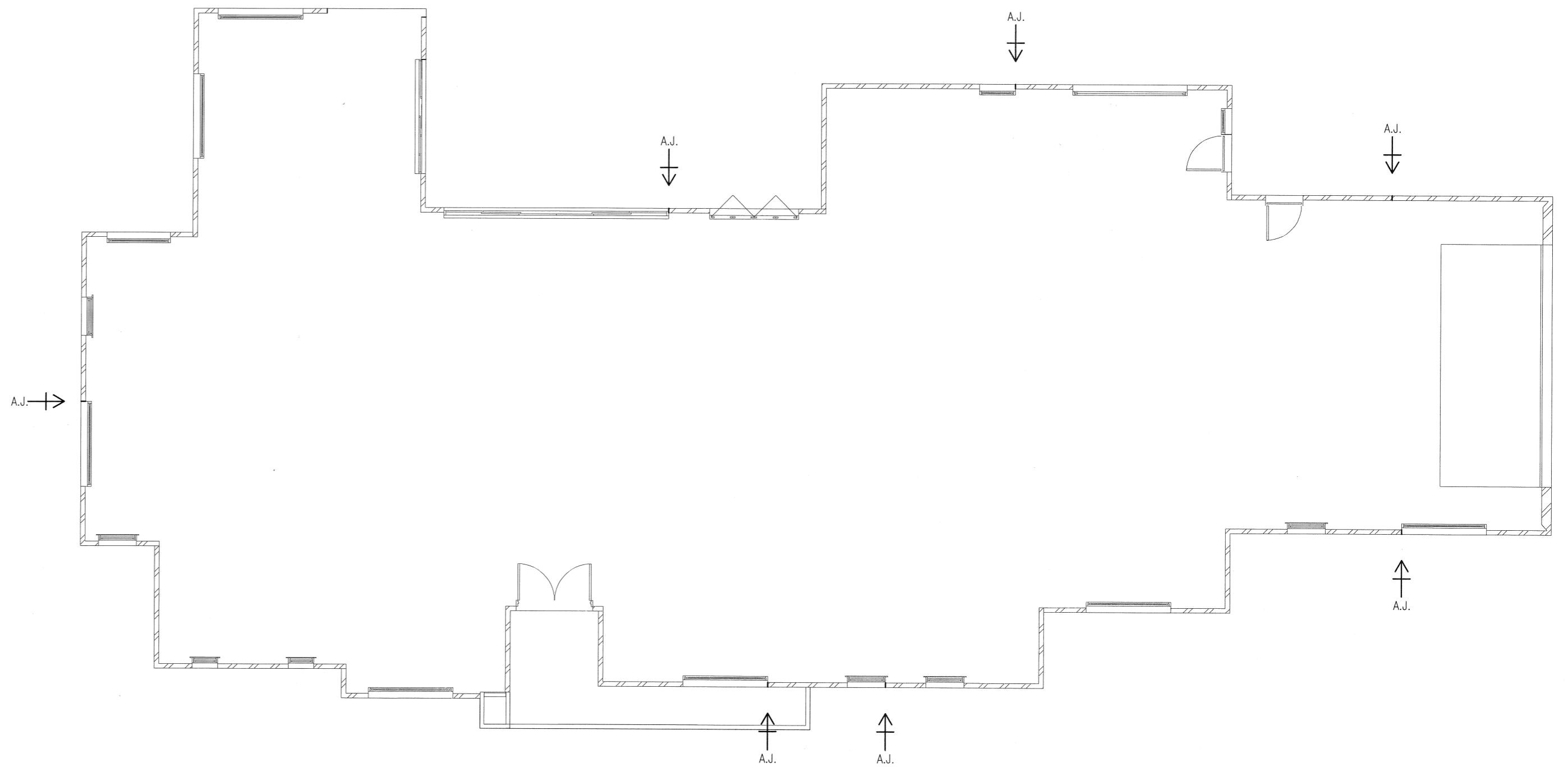
John Greer 12.09.2016

| TITLE | | SCALE |
|---|--|--------------------|
| SLAB PLAN AND BORE LOGS | | 1:100 (A2) |
| PROJECT | | DATE |
| PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOUN | | SEPTEMBER 2016 |
| | | DESIGNED |
| | | JKG |
| | | DRAWN |
| | | VJF |
| | | DWG. No. |
| | | 15-5086-S01 (of 8) |



TIES AND ANCHORS - PROVIDE WALL TIES TO EVERY 4TH COURSE ON EACH SIDE OF ARTICULATION JOINT. PROVIDE FLEXIBLE OR SLIDING TYPE ANCHORS BETWEEN ABUTTING PANEL EACH 4TH COURSE

ARTICULATION JOINT DETAIL
SCALE 1:10 BRICK VENEER

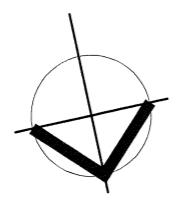


ARTICULATION JOINT LAYOUT
SCALE 1:100

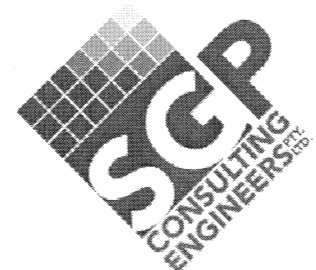
↑ LOCATION FOR FULL HEIGHT ARTICULATION JOINTS
A.J.
PROVIDE FULL HEIGHT ARTICULATION IN BRICKWORK AT 6.0 m MAXIMUM CENTRES IN ACCORDANCE WITH CEMENT & CONCRETE ASSOCIATION TECHNICAL NOTE 61 & BUILDING CODE OF AUSTRALIA.

REFER TO DRAWING S08 FOR GENERAL NOTES FOR CONCRETE SLABS AND FOOTINGS

CONSTRUCTION ISSUE



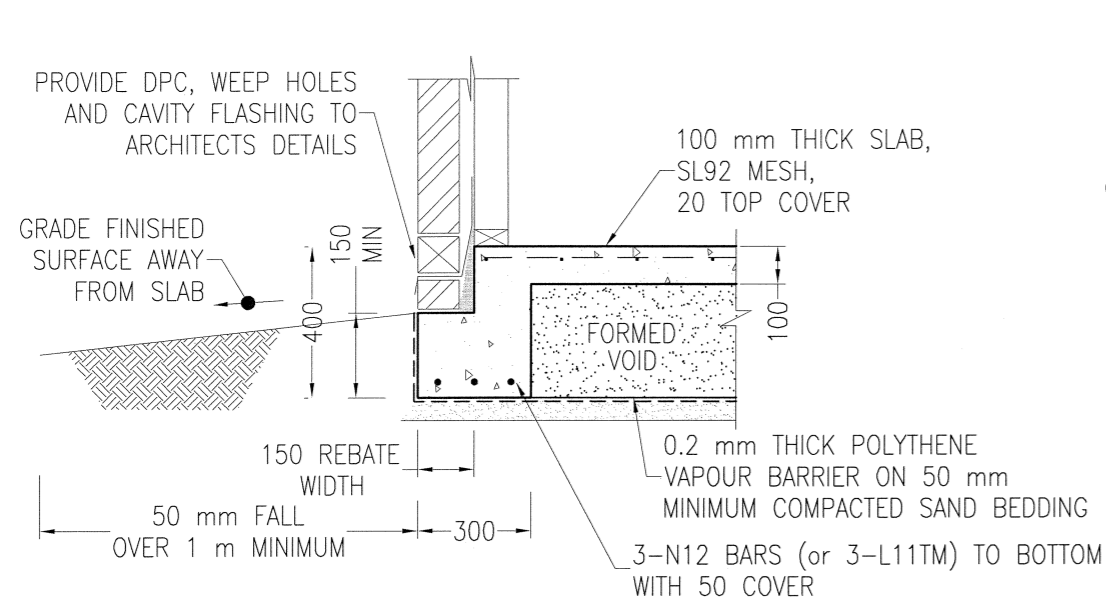
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|-------|------------|--------------------|
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| A | 23.07.2015 | CONSTRUCTION ISSUE |
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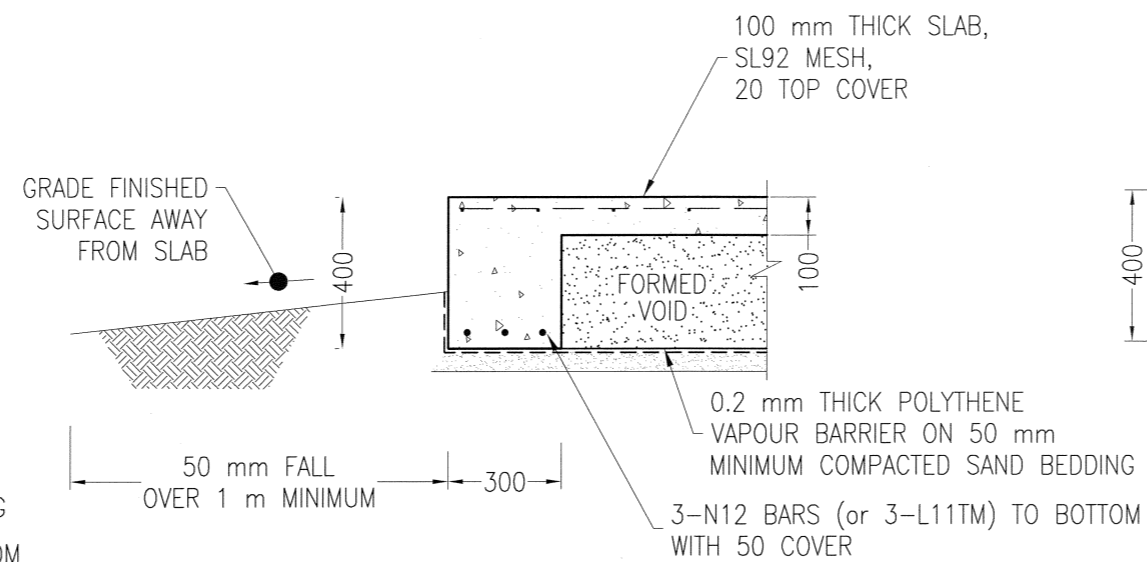
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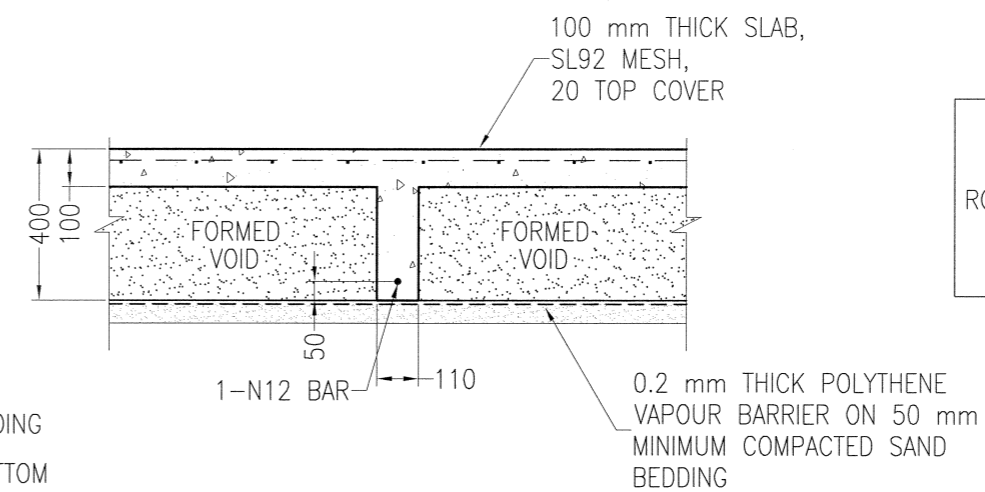
| | | | |
|---------|---|----------|--------------------|
| TITLE | ARTICULATION JOINTS | SCALE | 1:10, 1:100 (A2) |
| PROJECT | PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOUN | DATE | SEPTEMBER 2016 |
| | | DESIGNED | JKG |
| | | DRAWN | VJF |
| | | DWG. No. | 15-5086-S02 (of 8) |



EB1: EDGE BEAM
SCALE 1:20

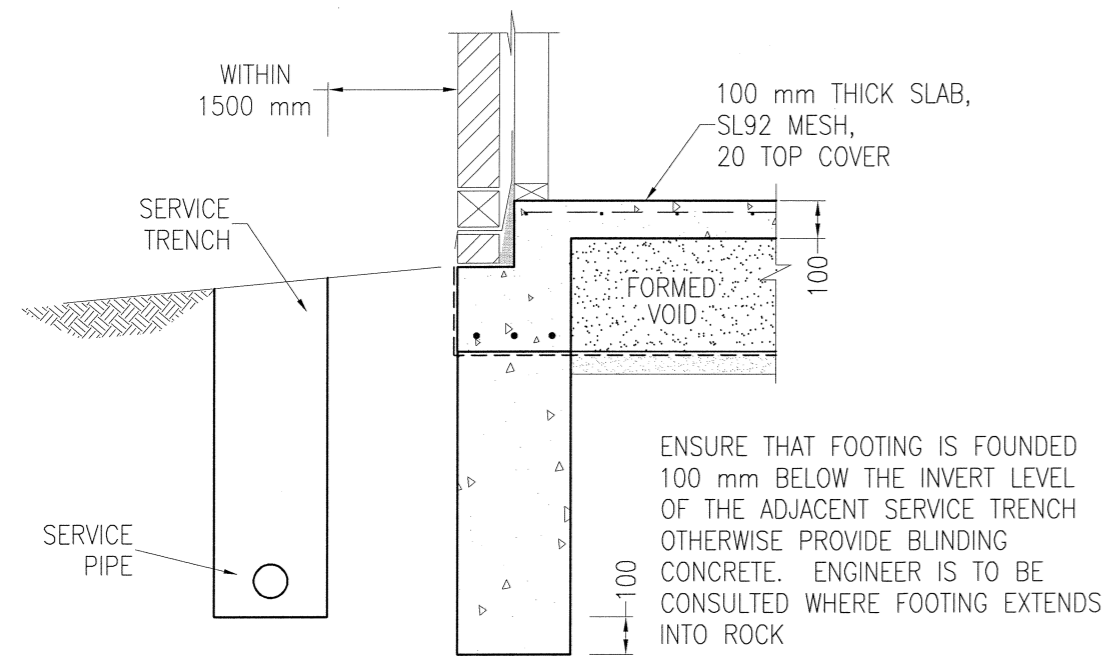


EB2: EDGE BEAM
SCALE 1:20

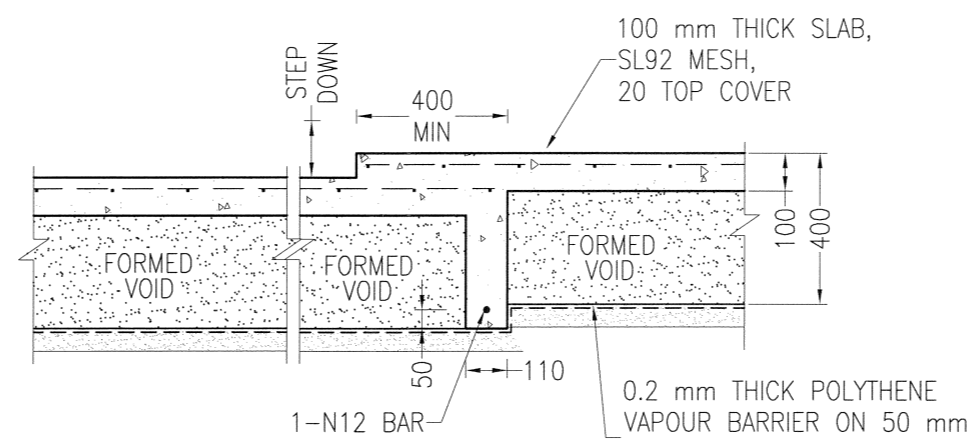


TYPICAL INTERNAL STEM
SCALE 1:20

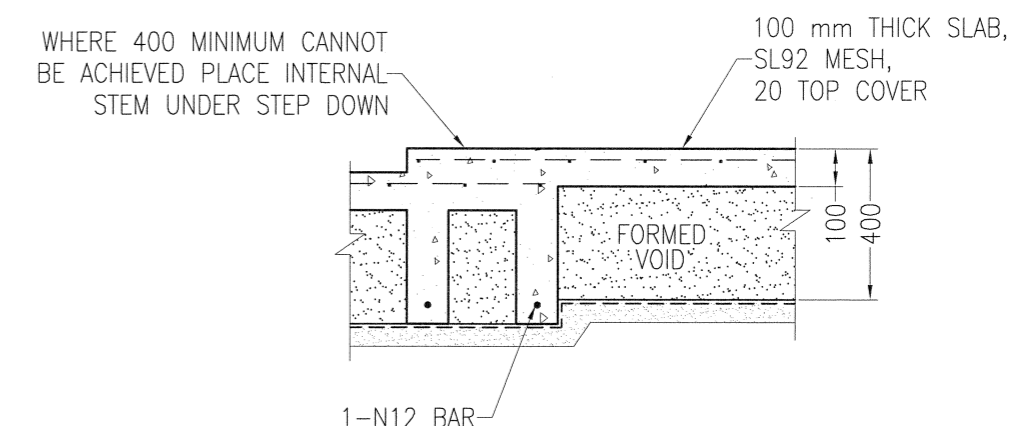
FILL UNDER SLAB PANELS TO BE 'ROLLED FILL' PER AS 2870, CLAUSE 6.4.2(b) GRANULAR FILL (SANDS, GRAVELS, CRUSHED ROCK) UP TO 600 mm IN DEPTH OR 300 mm IN DEPTH FOR OTHER MATERIAL OR 'CONTROLLED FILL' PER AS 2870, CLAUSE 6.4.2(a) GRANULAR FILL UP TO 800 mm IN DEPTH.



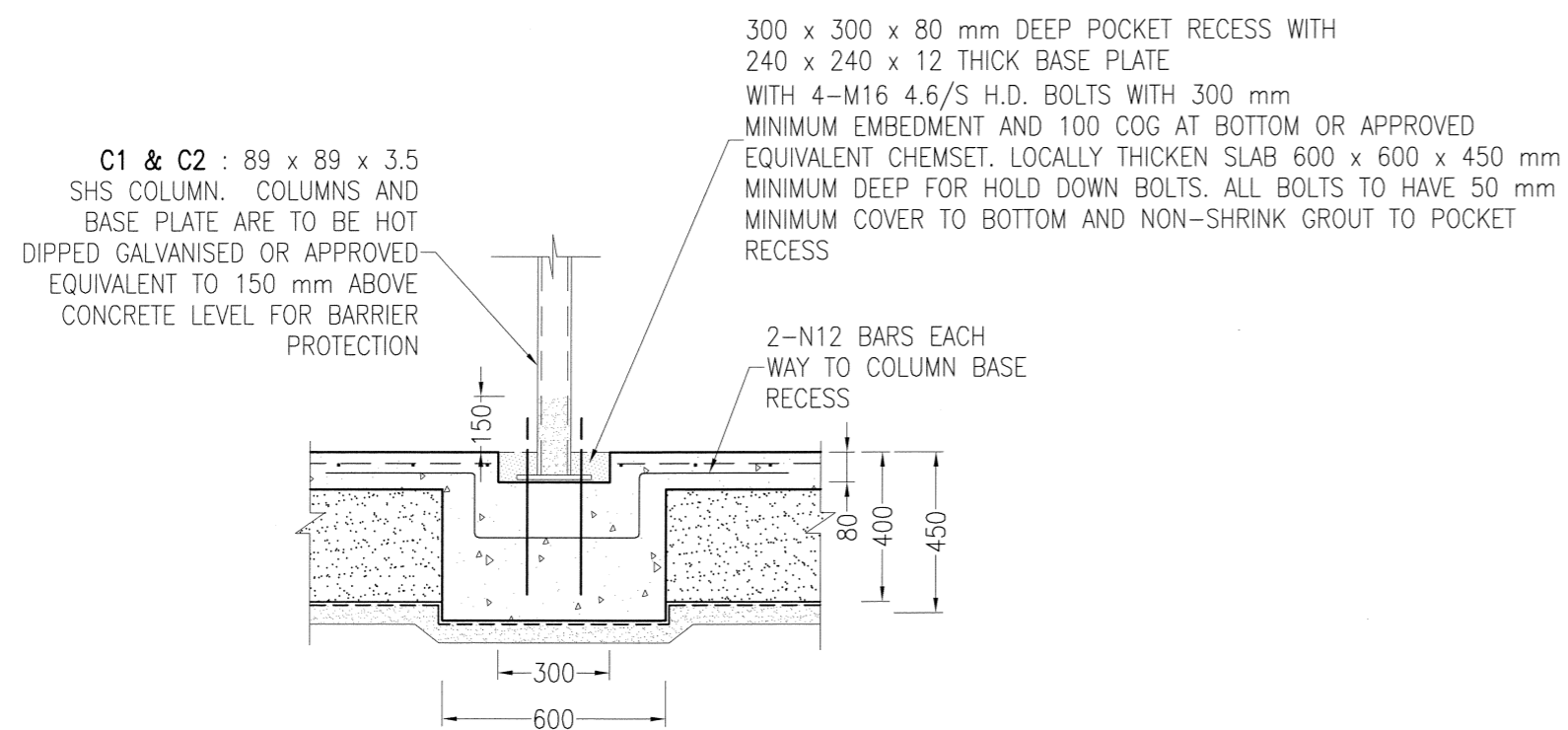
DETAIL WHERE FOOTING IS ADJACENT TO SERVICE TRENCH
SCALE: NTS



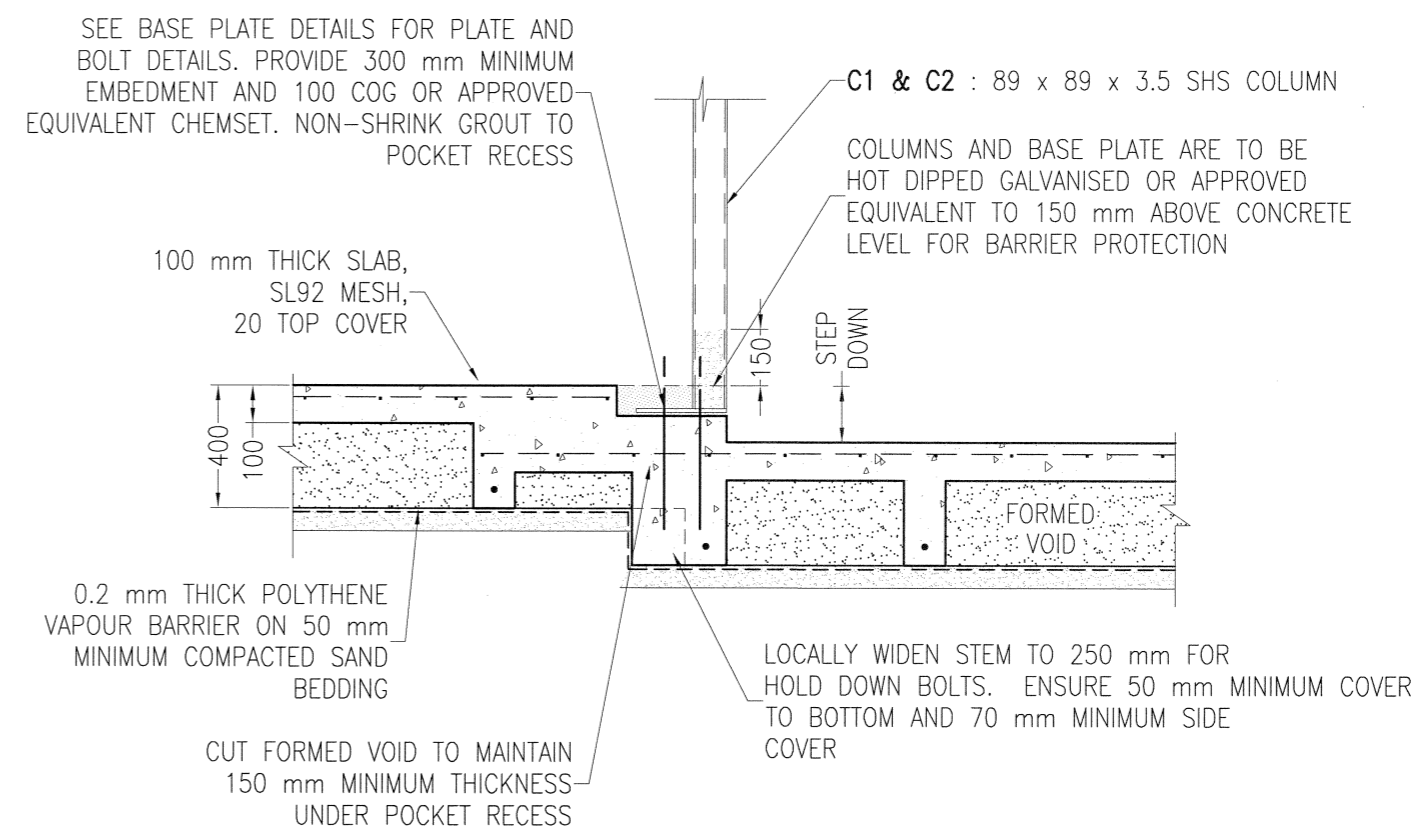
STEP IN SLAB DETAIL
SCALE 1:20



OR OPTION
SCALE 1:20



SLAB RECESS FOR COLUMN BASE
SCALE 1:20

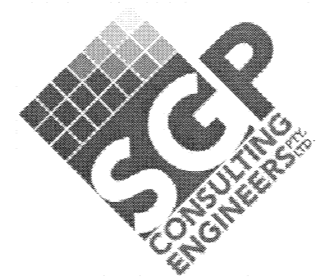


RECESSED COLUMN WITH STEP DOWN DETAIL
SCALE 1:20

REFER TO DRAWING S08 FOR GENERAL NOTES FOR CONCRETE SLABS AND FOOTINGS

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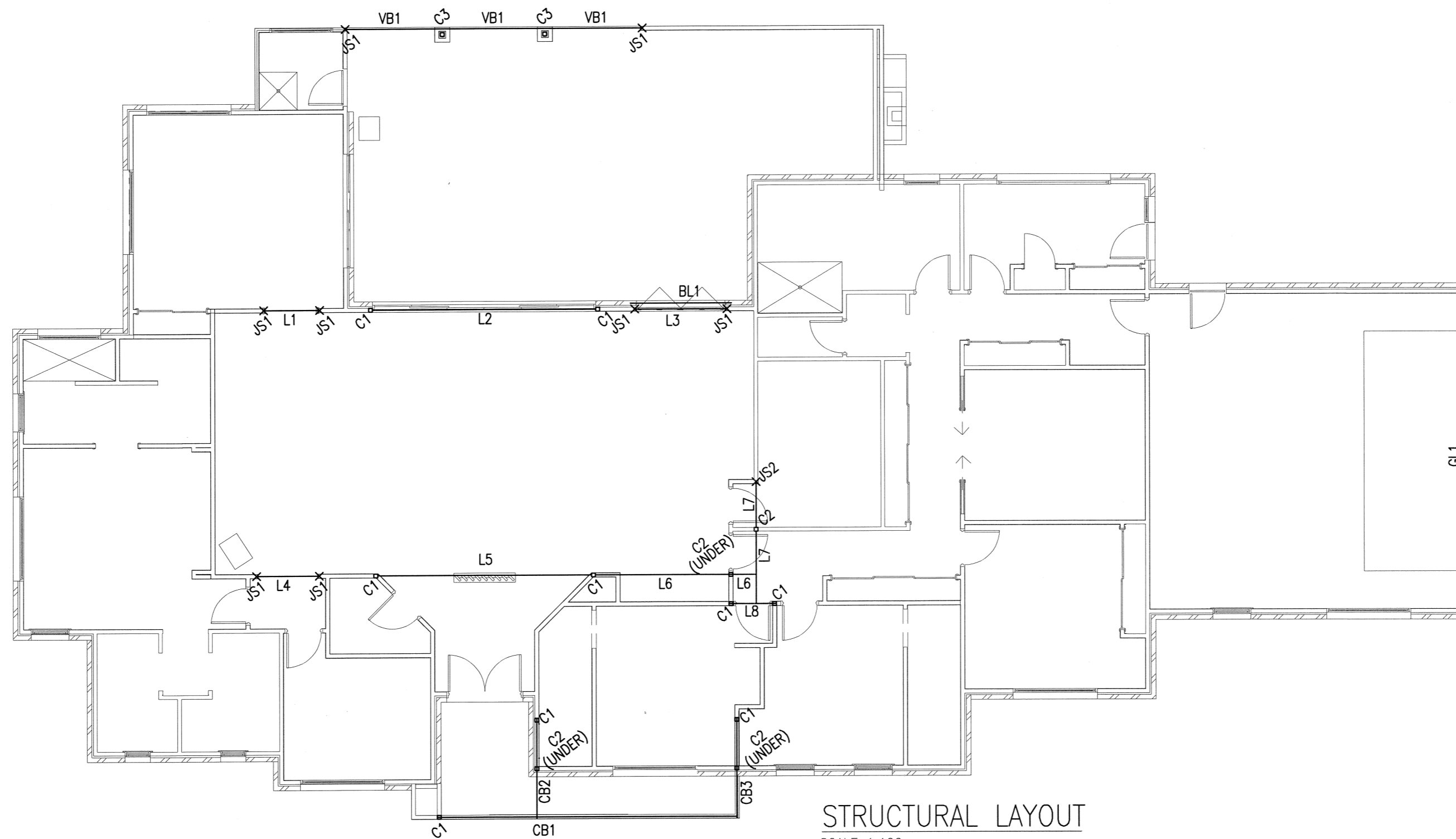


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| TITLE | SCALE |
|---|--------------------|
| SLAB AND FOOTING DETAILS | 1:20 (A2) |
| PROJECT | DATE |
| PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOUN | SEPTEMBER 2016 |
| | DESIGNED |
| | JKG |
| | DRAWN |
| | VJF |
| | DWG. No. |
| | 15-5086-S03 (of 8) |

John Greaves 12.09.2016



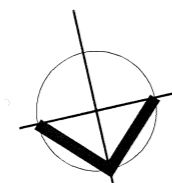
STRUCTURAL LAYOUT
SCALE 1:100

| MEMBER SCHEDULE | | |
|-----------------|---|---|
| MARK | DESCRIPTION | CONNECTION DETAIL |
| C1 to C2 | 89 x 89 x 3.5 SHS (C450) COLUMN | SEE TYPICAL BASE PLATE CONNECTIONS |
| C3 | 89 x 89 x 3.5 SHS (C450) COLUMN | SEE TYPICAL BASE PLATE CONNECTIONS |
| GL1 | 250 x 10 (V), 200 x 10 (H) TRADITIONAL T-BAR GALINTEL (REVISED) | DETAIL 1 |
| L1 | 190 x 45 MGP10 LINTEL | TYPE A1 : 4/2.8 mm x 35 NAILS EACH END OF STRAP |
| L2 | 230 PFC (GRADE 300) WITH 10 mm PLATE H.D. GAL. (REVISED) or 260 x 90 (V), 200 x 10 (H) J-BAR GALINTEL (REVISED) | SEE TYPICAL STEEL BEAM CONNECTION DETAILS, DETAIL 2 |
| L3 | 190 x 42 LVL15 LINTEL (REVISED) | SEE TYPICAL STEEL BEAM CONNECTION DETAILS, DETAIL 3 |
| L4 | 190 x 45 MGP10 LINTEL (REVISED) | TYPE A1 : 6/2.8 mm x 35 NAILS EACH END OF STRAP |
| L5 | 180 PFC (GRADE 300) LINTEL (REVISED) | TYPE A1 : 4/2.8 mm x 35 NAILS EACH END OF STRAP |
| L6 | 190 x 42 LVL15 LINTEL (CONTINUOUS OVER C2) | SEE TYPICAL STEEL BEAM CONNECTION DETAILS |
| L7 | 190 x 45 MGP10 LINTEL (REVISED) | SEE TYPICAL TIMBER BOLTED CONNECTION DETAILS, DETAIL 4 |
| L8 | 190 x 45 MGP10 LINTEL (REVISED) | MINIMUM 2/75 x 3.05 NAILS AT EACH JOINT, DETAIL 4 |
| VB1 | 170 x 42 LVL15 VERANDAH BEAM (REVISED) | SEE TYPICAL TIMBER CONNECTION DETAILS |
| JS1 | 3/90 x 45 MGP10 JAMB STUD (REVISED) | |
| JS2 | 2/90 x 45 MGP10 JAMB STUD (REVISED) | |
| CB1 | 250 PFC (GRADE 300) CANOPY BEAM (REVISED) | SEE TYPICAL STEEL BEAM CONNECTION DETAILS, DETAILS 5-6 |
| CB2 | 180 PFC (GRADE 300) CANOPY BEAM (CONTINUOUS OVER C2) (REVISED) | SEE TYPICAL STEEL BEAM CONNECTION DETAILS, DETAIL 6 |
| CB3 | 250 PFC (GRADE 300) CANOPY BEAM (CONTINUOUS OVER C2) (REVISED) | SEE TYPICAL STEEL BEAM CONNECTION DETAILS, DETAIL 5 |
| BL1 | 100 x 100 x 6 GALINTEL ANGLE BAR | REFER TO GALINTEL INSTALLATION GUIDE FOR ADDITIONAL DETAILS |

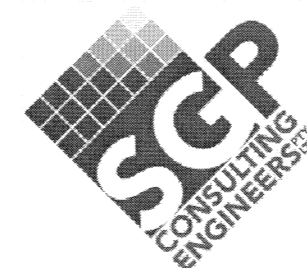
NOTE 1: POWERFIX OR TEK SCREW ALL COLUMNS TO STUDWORK WHERE POSSIBLE
 NOTE 2: BRICKWORK LINTEL BL1 IS DESIGNED FOR THE SUPPORT OF BRICKWORK ONLY, ROOF LOADS TO BE SUPPORTED BY L3 LINTEL
 NOTE 3: ALL COLUMNS AND STRUCTURAL MEMBERS NOT SPECIFIED IN THIS SCHEDULE ARE TO BE DESIGNED AND DETAILED BY OTHERS
 NOTE 4: SEE SHEET S07 FOR TYPE A CONNECTION DETAILS

REFER TO DRAWING S08 FOR GENERAL NOTES

CONSTRUCTION ISSUE



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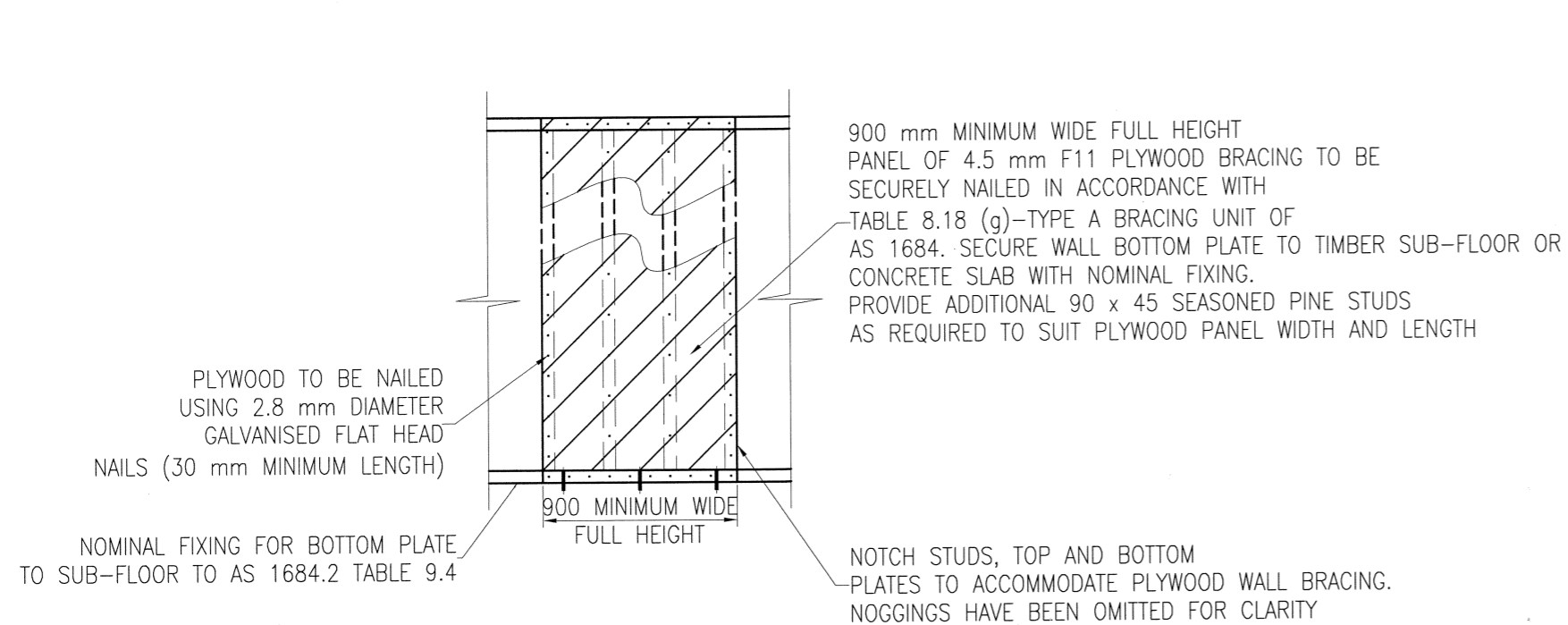
| TITLE | SCALE |
|---|----------------|
| STRUCTURAL MEMBERS | 1:100 (A2) |
| PROJECT | DATE |
| PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOWN | SEPTEMBER 2016 |
| DESIGNED | DRAWN |
| JKG | VJF |
| DWG. No. | ISSUE |
| 15-5086-S04 (of 8) | |

John Grewar 12.09.2016

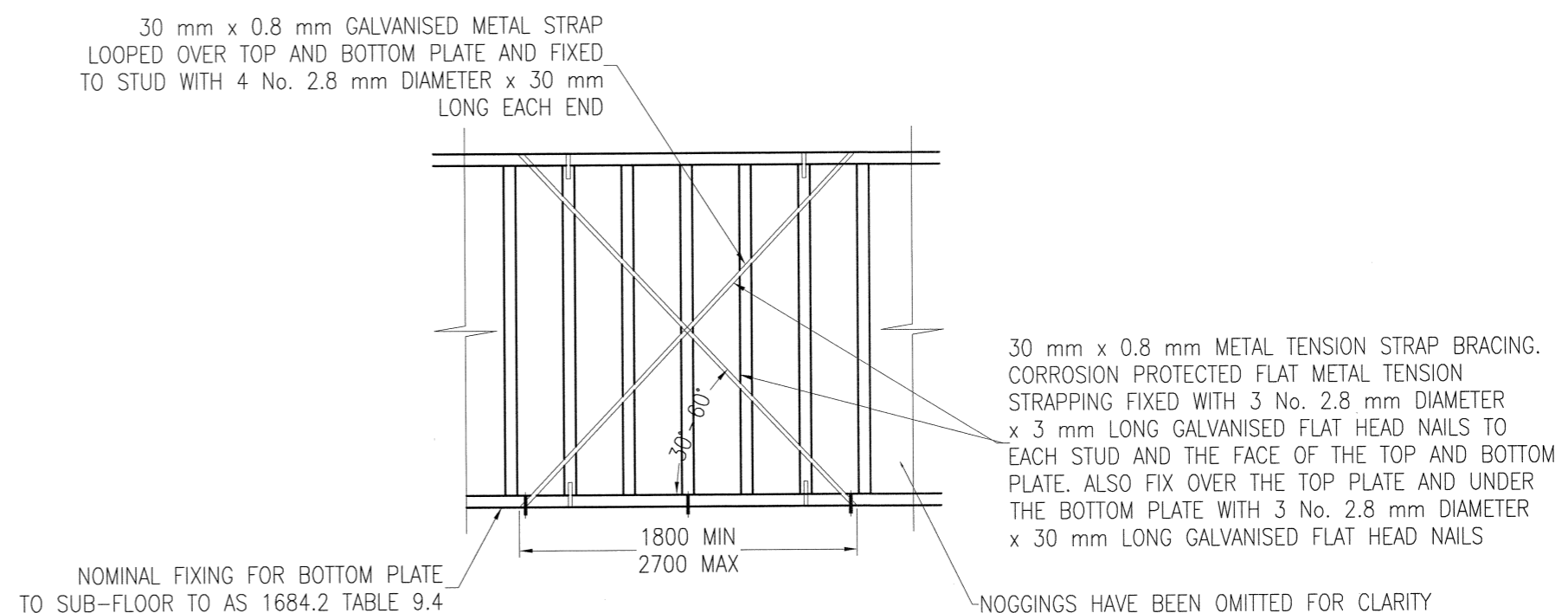


WIND BRACING LAYOUT

SCALE 1:100



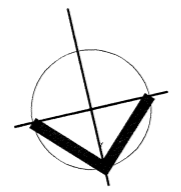
PLYWOOD BRACING TYPE PB1 (TYPE G BRACING)
TO AS 1684.2 TABLE 8.18 (g)
NTS



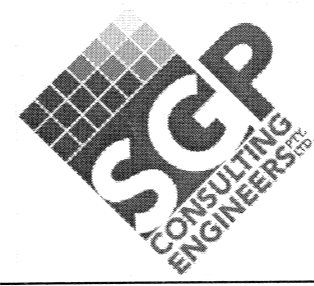
METAL TENSION STRAP BRACING TYPE MB1 (TYPE D BRACING)
TO AS 1684.2 TABLE 8.18 (d)
NTS

REFER TO DRAWING S08 FOR GENERAL NOTES

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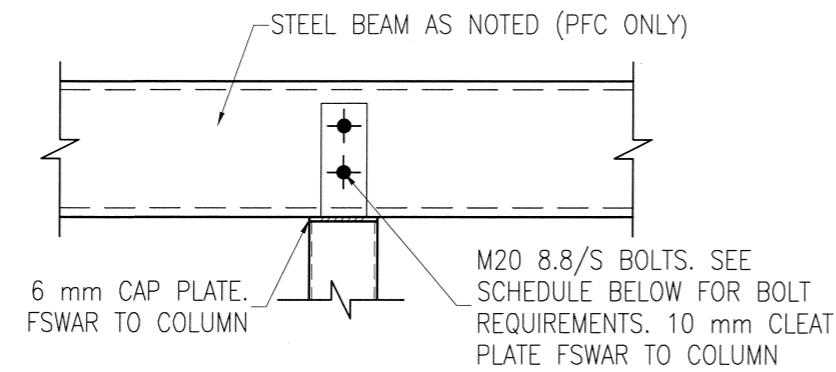


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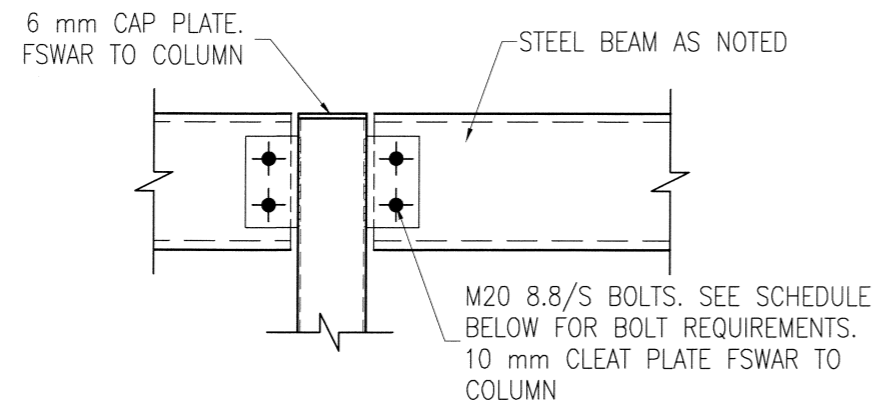
John Grewar 12.09.2016

| | | | |
|---------|---|----------|--------------------|
| TITLE | WALL BRACING | SCALE | 1:100 (A2) |
| PROJECT | PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOWN | DATE | SEPTEMBER 2016 |
| | | DESIGNED | JKG |
| | | DRAWN | VJF |
| | | DWG. No. | 15-5086-S05 (of 8) |



DOUBLE SPAN CONNECTION U.N.O.

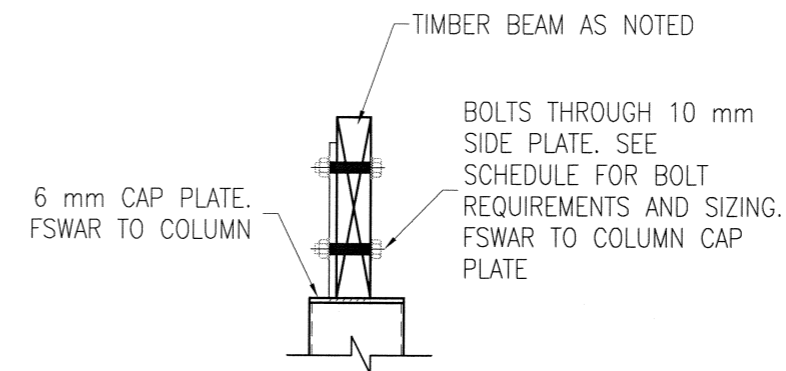
SCALE 1:10



BEAM TO COLUMN CONNECTION U.N.O.

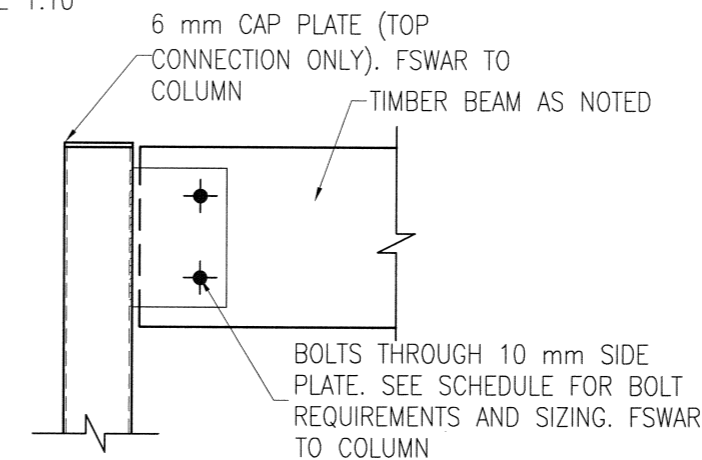
SCALE 1:10

TYPICAL STEEL BOLTED CONNECTION DETAILS



DOUBLE SPAN CONNECTION U.N.O.

SCALE 1:10



BEAM TO COLUMN CONNECTION U.N.O.

SCALE 1:10

TYPICAL TIMBER BOLTED CONNECTION DETAILS

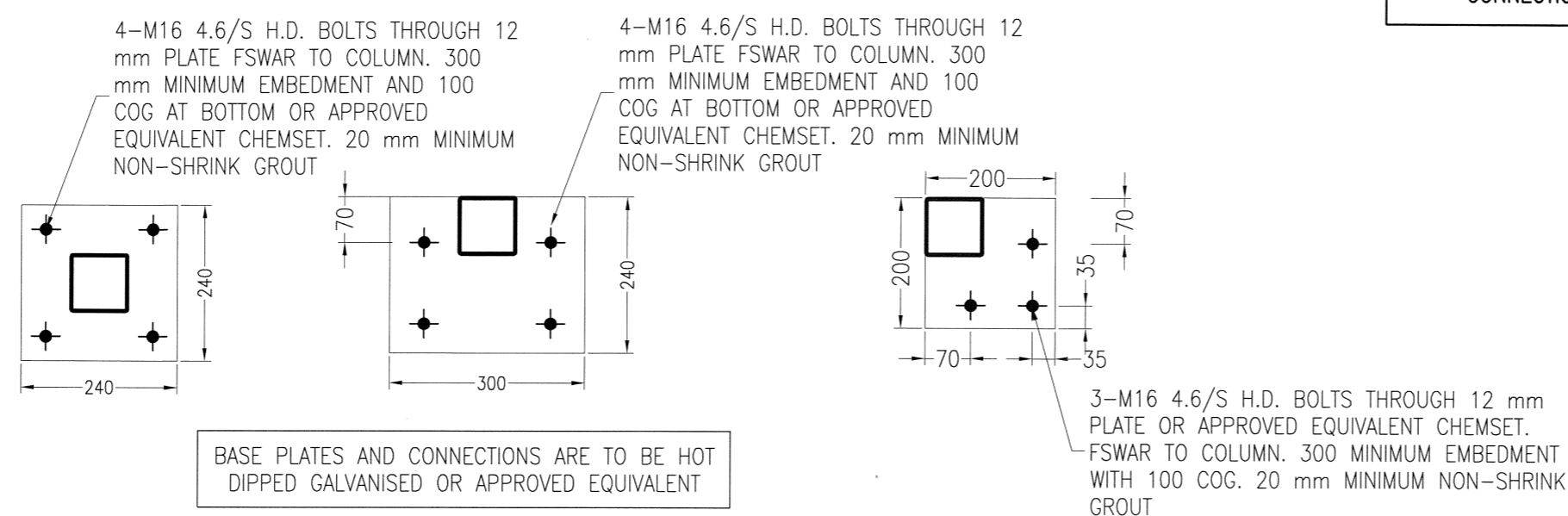
| BOLT SCHEDULE | | | |
|---------------|--------------|-----------|--------------|
| BEAM SIZE | No. OF BOLTS | BEAM SIZE | No. OF BOLTS |
| 150 UB | 2 BOLTS | 150 PFC | 2 BOLTS |
| 180 UB | 2 BOLTS | 180 PFC | 2 BOLTS |
| 200 UB | 2 BOLTS | 200 PFC | 2 BOLTS |
| 250 UB | 2 BOLTS | 230 PFC | 2 BOLTS |
| 310 UB | 3 BOLTS | 250 PFC | 3 BOLTS |
| 360 UB | 4 BOLTS | 300 PFC | 3 BOLTS |
| 410 UB | 4 BOLTS | 380 PFC | 4 BOLTS |

MINIMUM EDGE DISTANCE FOR BOLTS : 35 mm MINIMUM U.N.O.
MINIMUM BOLT SPACING : 70 mm MINIMUM U.N.O.

| BOLT SCHEDULE | | |
|-----------------|--------------|-----------|
| BEAM SIZE | No. OF BOLTS | BOLT SIZE |
| 170 mm - 240 mm | 2 BOLTS | M12 4.6/S |
| 240 mm - 360 mm | 2 BOLTS | M16 4.6/S |
| 370 mm + | 4 BOLTS | M16 4.6/S |

MINIMUM EDGE DISTANCE FOR BOLTS (M12): 50 mm MINIMUM
MINIMUM BOLT SPACING (M12): 60 mm MINIMUM
MINIMUM EDGE DISTANCE FOR BOLTS (M16): 65 mm MINIMUM
MINIMUM BOLT SPACING (M16): 80 mm MINIMUM

NOTE: ALL TIMBER IS TO HAVE A MINIMUM OVERALL THICKNESS OF 42 mm TO BE SUITABLE FOR BOLTED CONNECTION UNLESS OTHERWISE NOTED

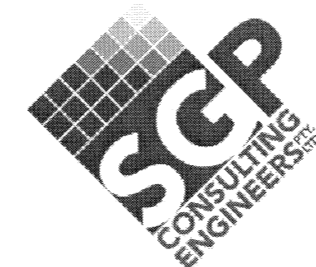


TYPICAL BASE PLATE CONNECTION DETAILS FOR C1 AND C2 COLUMNS

SCALE 1:10

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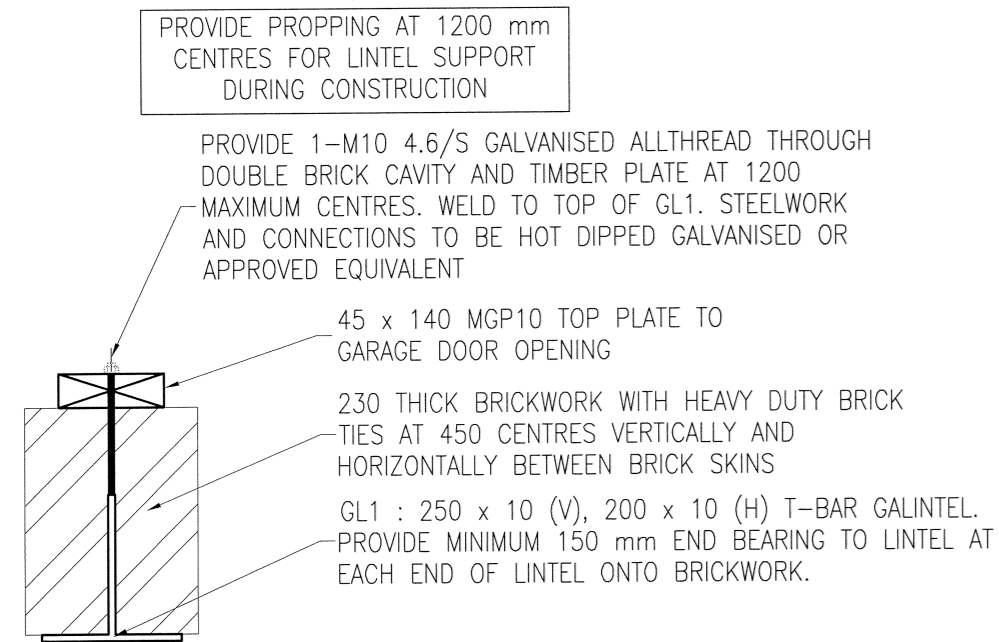
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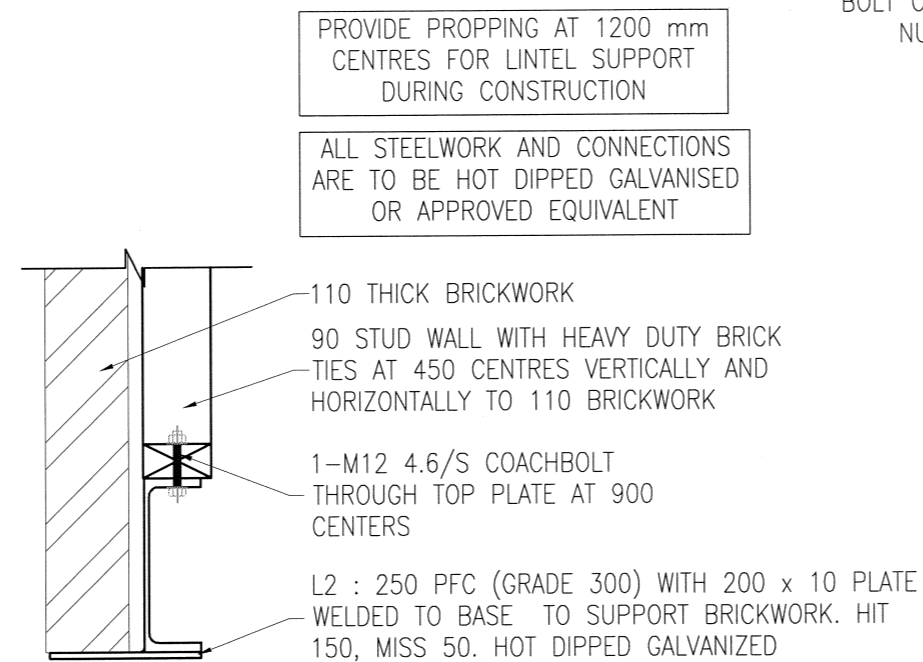
John Grewar 12.09.2016

REFER TO DRAWING S08 FOR GENERAL NOTES

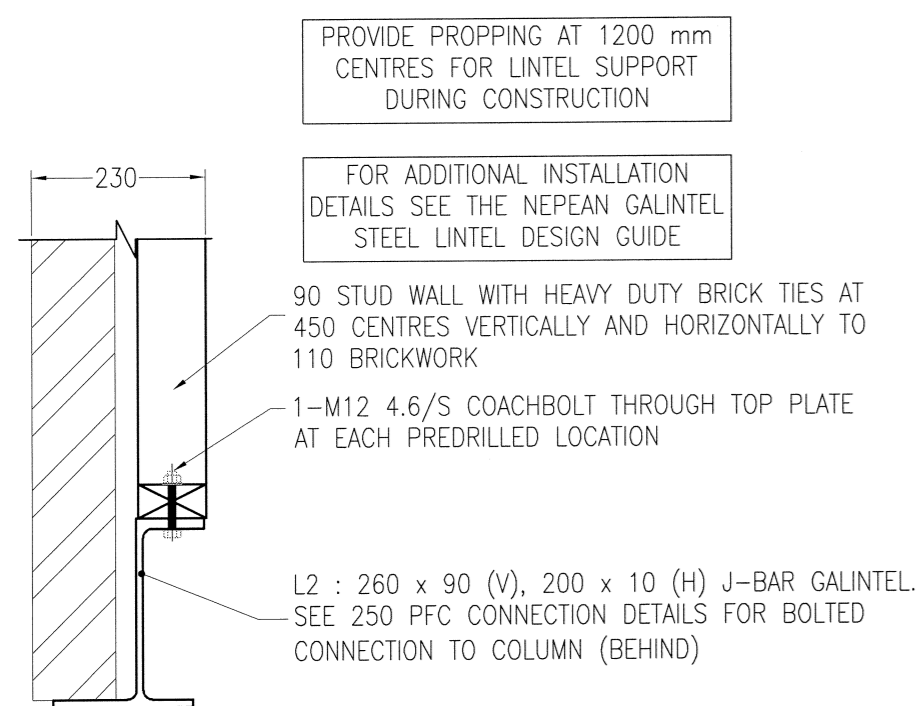
| TITLE | | SCALE |
|---|--|--------------------|
| STRUCTURAL DETAILS | | 1:10 (A2) |
| PROJECT | | DATE |
| PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOUN | | SEPTEMBER 2016 |
| | | DESIGNED |
| | | JKG |
| | | DRAWN |
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| | | DWG. No. |
| | | 15-5086-S06 (of 8) |



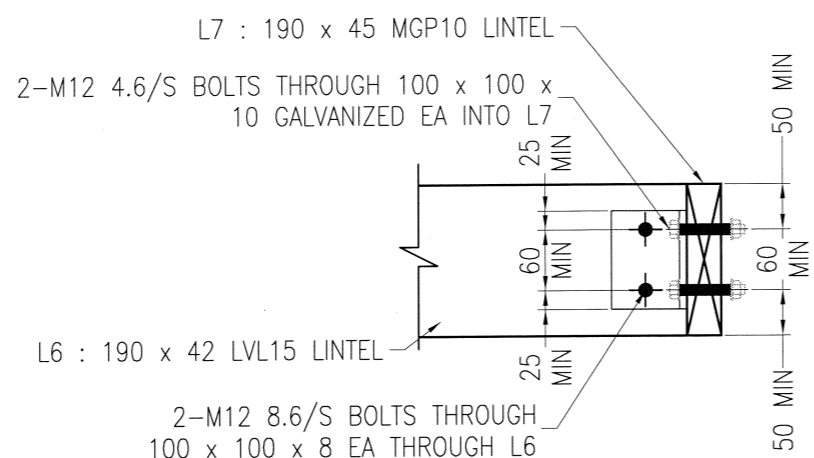
DETAIL 1 : T-BAR GALINTEL INSTALLATION DETAIL
SCALE 1:10



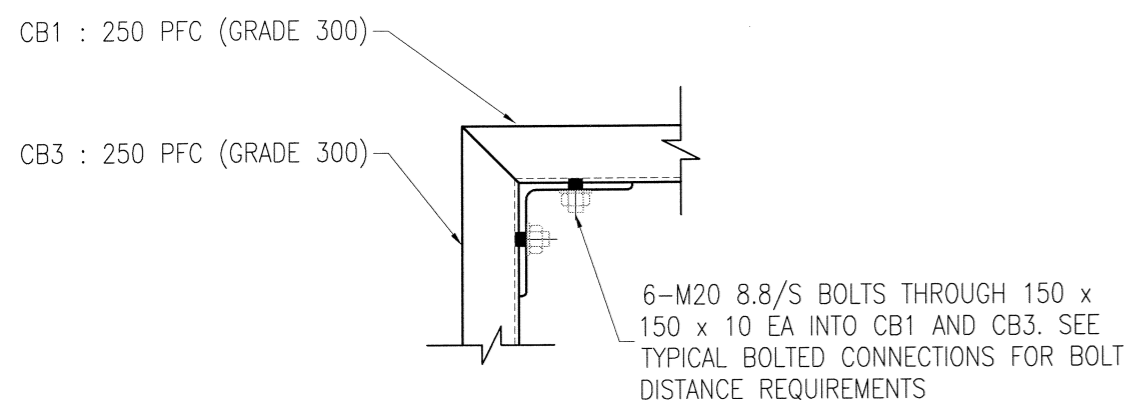
DETAIL 2 : LINTEL L2 INSTALLATION DETAIL
SCALE 1:10



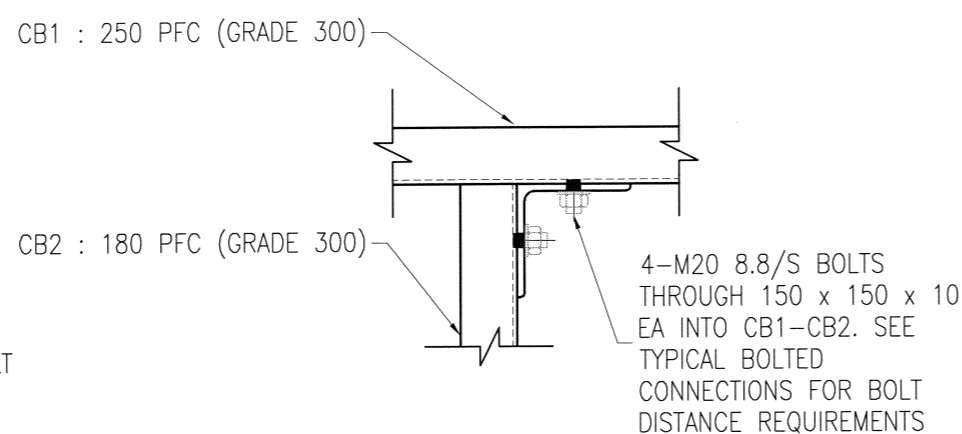
DETAIL 3 : J-BAR GALINTEL TO STUD WALL INSTALLATION DETAIL
SCALE 1:10



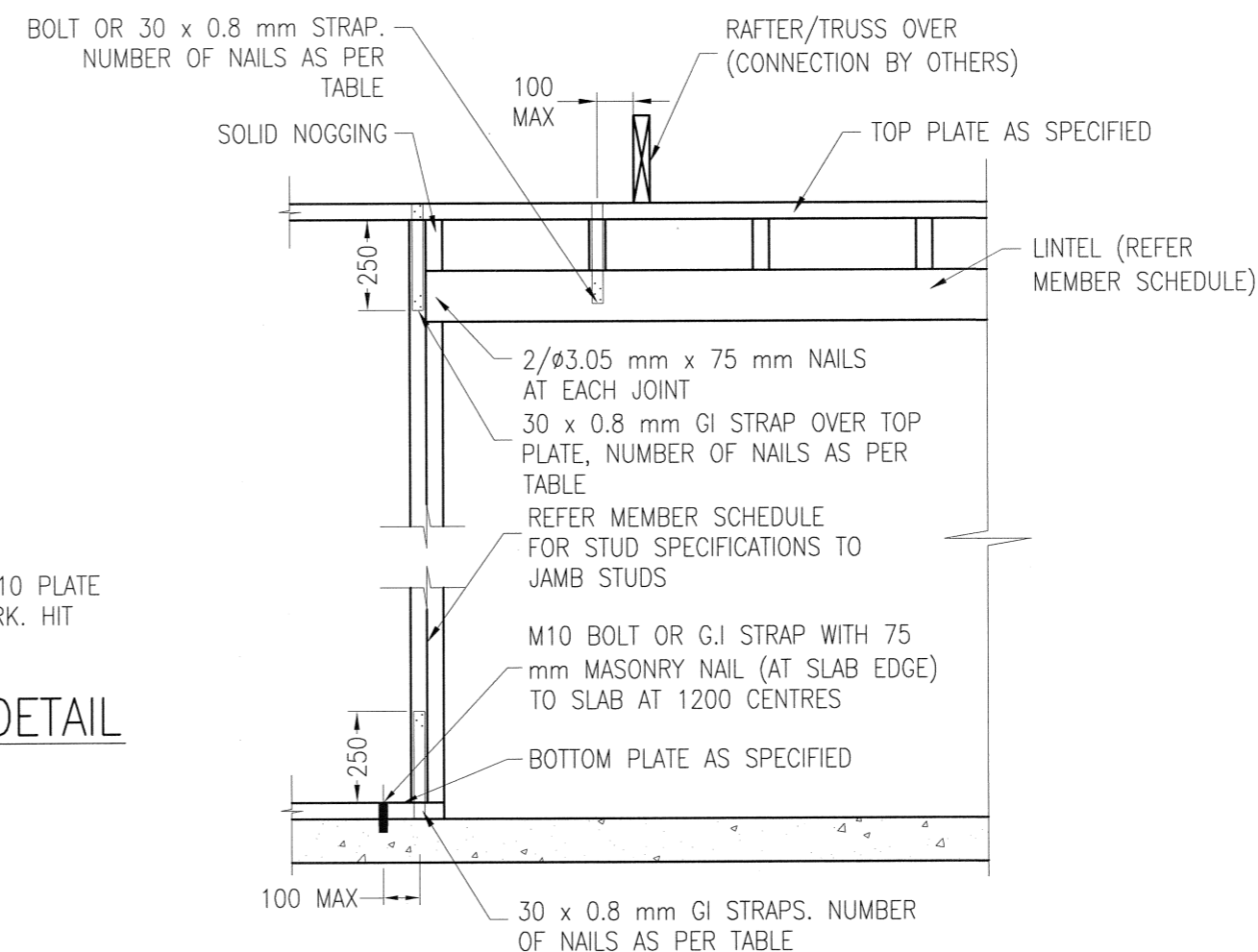
DETAIL 4 : LINTEL L6 TO LINTEL L7 CONNECTION DETAIL
SCALE 1:10



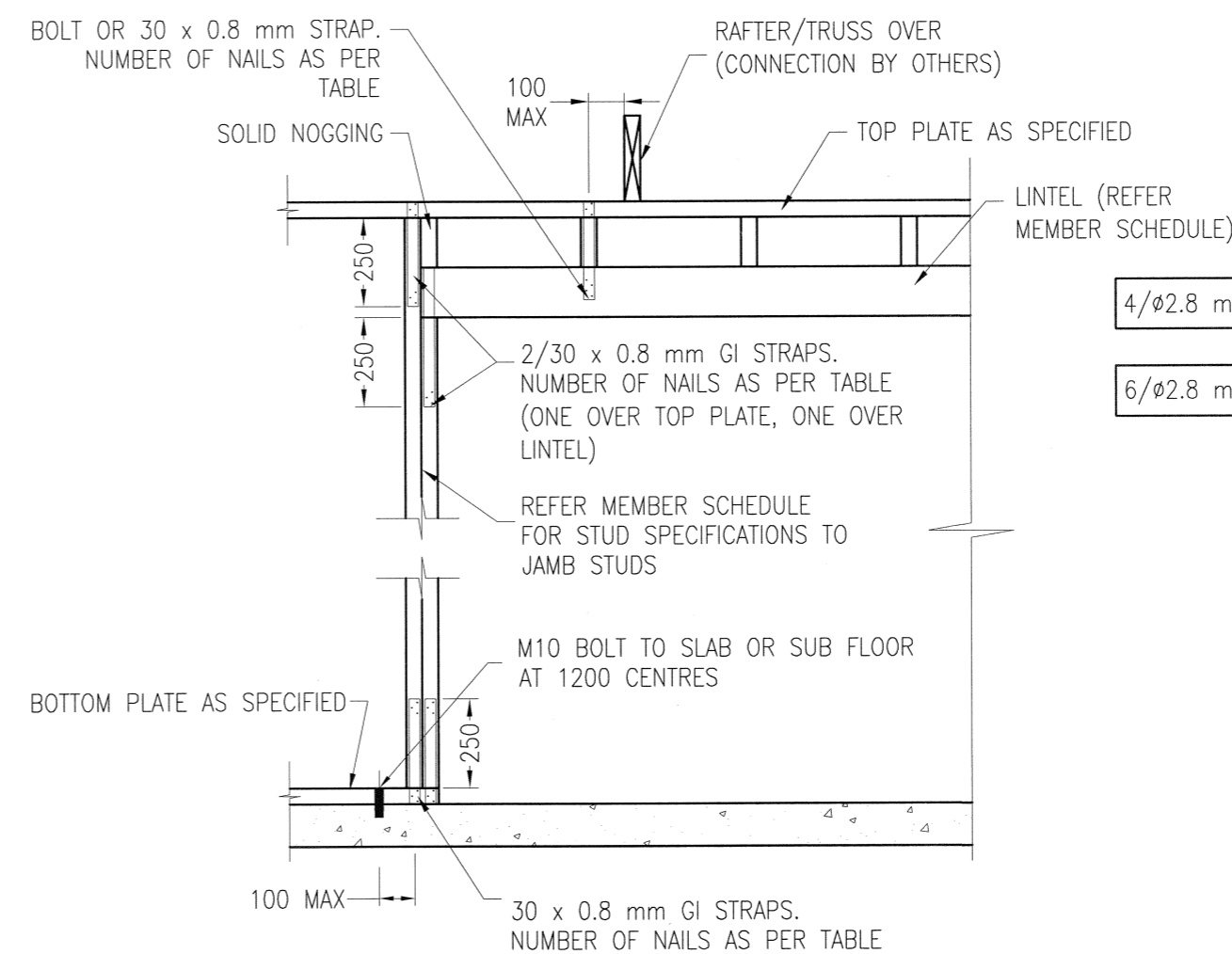
DETAIL 5 : BOLTED PFC MITRE CONNECTION DETAIL
SCALE 1:10



DETAIL 6 : BOLTED PFC END CONNECTION DETAIL
SCALE 1:10



TYPE A1



TYPE A2

TYPICAL LINTEL - JAMB STUD CONNECTION (TYPE A)
SCALE 1:20

RAFTER CAN BE TIED DIRECTLY TO THE LINTEL USING FIXING OF EQUIVALENT STRENGTH TO THAT REQUIRED FOR THE RAFTER/TRUSS

| UPLIFT CAPACITY, kN (TYPE A1) | | | | | |
|---|-----|-----|-----------------|-----|-----|
| UNSEASONED TIMBER | | | SEASONED TIMBER | | |
| J2 | J3 | J4 | JD4 | JD5 | JD6 |
| 4/ø2.8 mm x 35 mm NAILS EACH END OF STRAP | | | | | |
| 8.3 | 5.9 | 4.2 | 5.9 | 4.9 | 3.7 |
| 6/ø2.8 mm x 35 mm NAILS EACH END OF STRAP | | | | | |
| 12 | 8.4 | 5.9 | 8.4 | 6.9 | 5.2 |

| COMMON TIMBER JOINT GROUPS | | |
|----------------------------|------------|--------------------------|
| TIMBER TYPE | UNSEASONED | SEASONED |
| PINE (MGP10) | - | JD5 |
| PINE (MGP12) | - | JD4 |
| OREGON | J4 | JD4 |
| F5 | J4 | JD5 |
| F7 | J4 | JD4 |
| F17-F27 HARDWOOD | J3 | JD3 |
| IRONBARK | J1 | JD1 |
| LVL15 | - | JD3 (FACE) JD4 (EDGE) |

NOTE: BUILDER TO CHECK JOINT GROUP FOR PARTICULAR SPECIES REQUIREMENTS ON SITE

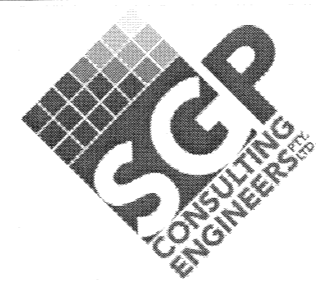
| UPLIFT CAPACITY, kN (TYPE A2) | | | | | |
|--|----|-----|-----------------|-----|-----|
| UNSEASONED TIMBER | | | SEASONED TIMBER | | |
| J2 | J3 | J4 | JD4 | JD5 | JD6 |
| 4/ø2.8 mm x 35 mm NAILS EACH END OF STRAP. M10 BOLT TO FLOOR | | | | | |
| 17 | 12 | 8.4 | 12 | 9.8 | 7.4 |
| 6/ø2.8 mm x 35 mm NAILS EACH END OF STRAP. M12 BOLT TO FLOOR | | | | | |
| 17 | 17 | 12 | 17 | 14 | 10 |

FIXINGS SPECIFIED IN THE MEMBER SCHEDULE PROVIDE FOR THE MINIMUM REQUIRED STRENGTH IN UPLIFT. CONNECTIONS SPECIFIED MAY BE SUBSTITUTED WITH CONNECTIONS OF HIGHER UPLIFT CAPACITY

REFER TO DRAWING S08 FOR GENERAL NOTES

CONSTRUCTION ISSUE

| No. | DATE | REMARKS |
|-------|------------|--------------------|
| 0 | 12.09.2016 | CONSTRUCTION ISSUE |
| A | 23.07.2015 | CONSTRUCTION ISSUE |
| ISSUE | | |



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| TITLE | SCALE |
|---|--------------------|
| STRUCTURAL DETAILS | 1:10, 1:20 (A2) |
| PROJECT | DATE |
| PROPOSED RESIDENCE FOR COLE AND LANGLEY AT LOT 6, 41A POPES ROAD, JUNORTOWN | SEPTEMBER 2016 |
| | DESIGNED |
| | JKG |
| | DRAWN |
| | VJF |
| | DWG. No. |
| | 15-5086-S07 (of 8) |

John Greaves 12.09.2016

GENERAL NOTES – RESIDENTIAL

- G1 These drawings shall be read in conjunction with all Architectural and other Consultants' drawings and specification and with such other written instructions as may be issued during the course of the Contract. All discrepancies shall be referred to the Principal for decision before proceeding with the work.
- G2 All dimensions relevant to setting out and off-site shall be verified by the Contractor before construction and fabrication is commenced. The Engineer's drawings shall not be scaled, whether or not they are computer generated.
- G3 During construction, the Contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part shall be overstressed under construction activities. All Victorian Workcover – Occupational Health and Safety Division Codes of Practice are to be complied with. When requested, the Contractor shall provide calculations to justify the adequacy of the structure to safely withstand any imposed loads and/or construction procedure.
- G4 Workmanship, materials and quality, to be in accordance with the relevant current S.A.A. Codes including all amendments, all other Codes of Practice, and the Local Statutory Authorities Regulations, except where varied by Contract documents.
- G5 The approval of a substitution shall be sought from the Engineer but is not an authorisation for an additional cost variation. Any variation must be approved by the Principal in writing before the work commences. The Contractor is to record all substitutions or deviations from the Contract documents and submit them to the Principal as they arise.
- G6 All dimensions are in millimetres unless stated otherwise. All levels are expressed in metres.
- G7 The structural work shown on these drawings has been designed for the following live loads:

| AREA | LIVE LOAD kPa | KN |
|-----------|------------------|-----|
| ROOF | 0.25 (min) | 1.1 |
| RESIDENCE | 1.5 | 2.8 |

- G8 The wind forces acting on the structure have been calculated in accordance with AS 1170, Part 2 – 2011 and AS 4055 – 2012.
- WIND LOADS FOR HOUSING – WIND CLASS : N2
WIND TERRAIN CATEGORY : 2
- G9 Earthquake Design Classification : A
- G10 All props and formwork for beams and slabs shall be removed before construction of any masonry walls or partitions on the floor.
- G11 All non loadbearing walls shall be kept clear of the underside of slabs and beams by 20 mm unless otherwise shown.
- G12 For all inspections required in these documents, a minimum of 48 hours notice is to be given.
- G13 Copyright in all drawings and other documents provided shall remain vested in SGP Consulting Engineers Pty Ltd unless specifically assigned.
- G14 Any proposed variation in the construction sequence shown or implied herein shall be taken up with the Principal or their nominated representative, by the Contractor at the time of submitting their bid.
- G15 Prior to the Contractor submitting their Tender, should any portion of the building or other such item be unclear or the Contractor cannot interpret sufficiently to confidently prepare their price, then the Contractor is to list any item and submit to the Principal for clarification. The Contractor's enquiry and any response to such enquiry does not remove the Contractor from the requirements and responsibilities of the Tender.
- G16 Any defect or deviation from the Contract documents that requires correction, as determined by the Engineer, is to be at the Contractor's expense; including the Consultant's time to be charged at the nominated rate.

GENERAL NOTES FOR CONCRETE SLABS & FOOTINGS

- Dimensions shown are the minimum required. Setout and slab dimensions are to be derived from the architectural drawings.
- The builder is to confirm regulatory floor height requirements.
- Materials and workmanship are to be in accordance with the relevant current code of the Standards Association of Australia AS 2870 and the Building Regulations, except where varied by the Specification. During construction the structure shall be maintained in a stable condition and no part shall be overstressed under construction activities.
- Existing fill, topsoil and any clayey silt shall be removed from under the slab prior to placement of controlled/rolled fill. Edge beams are to be founded on the natural founding material as described in the bore holes or on controlled fill. Where internal beams are specified, they are to be founded on the natural founding material or on controlled or rolled fill.
- Controlled fill shall be placed in accordance with AS 3798. Sand fill shall be placed up to 0.8 m deep, well compacted in not more than 0.3 m thick layers by a vibrating plate or vibrating roller. Non sand fill may be placed in up to 0.4 m deep, well compacted in not more than 0.15 m thick layers by a mechanical roller. Clay fill shall be moist during compaction.
- Rolled fill consists of material compacted in layers by repeated rolling with an excavator. Rolled fill shall not exceed 0.6 m compacted in layers not more than 0.3 m thick for sand. Other materials may be placed to 0.3 m depth in layers not more than 0.15 m thick. These depths are depths measured after compaction.
- Unrestrained batter angles resulting from site filling should not exceed 30° above horizontal. It is recommended that cut and filled areas be revegetated or retained to prevent erosion.
- Where site cutting is carried out to level the site, unrestrained batter angles resulting from excavations should not exceed 45° in the fill, clayey silt and silty clay profiles.
- Reinforced concrete as per AS 3600–2009; Trench mesh shall have all cross wires cut flush with the outer main wires and a minimum lap of 500 mm; reinforcement clear cover 20 mm top of slab, 40 mm cover to bottom beams, reinforcement laps on fabric to be one full mesh panel, both side and end lapped. Reinforcing steel is to be free of loose rust, grease, oil or soil and to be in accordance with AS/NZS 4671.
- Provide 0.2 mm waterproof vapour barrier, all laps 200 minimum and joints to be taped. Termite Treatment under the vapour barrier to AS 3666 and to the Building Surveyors requirements.
- Service piping trenches to be offset from footings a minimum of 500 mm. Install sleeves through raft stiffener beams with 50 mm clearance. When service penetration is within 150 mm of base of beams provide local thickening.
- Concrete F'c = N20 Grade at 28 days, 80 slump. Concrete to be compacted and worked around reinforcement by use of a mechanical vibrator. Provide bar chairs at 1m max. centres. Concrete to be cured for 7 days by approved method. Concrete is to be available for testing during pouring.
- Slab on ground for brick veneer construction shall have an edge rebate as per Section 5.3.4 of AS 2870 Where the slab surface is recessed to provide for services, then the soffit of the slab shall be deepened to maintain the required thickness.
- Any changes to the slab layout should be approved by the design engineer.
- Depth of concrete below edge rebate to be at least 150 mm.
- Drainage shall be designed and constructed to avoid water ponding against or near the footing. The ground in the immediate vicinity of the perimeter footing, including the ground uphill from the slab on cut-and-fill sites, shall be graded to fall 50 mm minimum away from the footing over a distance of 1 m.
- Cure slab for at least 7 days by ponding or plastic covering. Avoid pouring concrete in temperatures greater than 35°C.
- Hard floor tiles should not be installed on to concrete floors for a period of 18 months due to concrete shrinkage, unless a flexible proprietary grout is used. The time of attachment of floor coverings and the selection of the adhesive for them should take into account the moisture in the concrete floor and its possible effect on adhesion. Concrete floors can take a considerable time to dry (three to nine months).
- All leaks in plumbing should be repaired promptly.
- Shrinkage cracking can be expected in concrete floors. Concrete floors can also be damaged by swelling of reactive clays or settlement of fill.
- This slab and footing system has been designed to comply with the minimum requirements of AS 2870–2011. This code recognises that some damage to walls and slabs will occur in a significant proportion of houses, particularly those on reactive clays, and the various levels of damage are discussed in Paragraph B3 of AS 2870–2011. This damage should not exceed category 0 or 1, unless abnormal moisture conditions are allowed to develop. Refer to Note 28.
- New or existing trees or large shrubs should not be located close to the building, as tree roots can influence the movement of soils and cause cracking of walls in the dwelling.

As a guide only, the following table may be considered:

| Site Classification | Minimum Proposed Distance of Tree Trunk from Building |
|---------------------|---|
| S | 0.5 x mature height |
| M | 1.0 x mature height |
| H1-D | 1.5 x mature height |
| H2-D | 2.0 x mature height |

An engineer or arborist should be consulted for further clarification.

- Construct articulation joints in brick walls at maximum spacing of 5.0 metres in accordance with TN61 Articulated Walling by Cement and Concrete Association of Australia and as shown on the drawing. Locations to align with windows, doors etc and junction of existing and new brickwork.
- Flexible plumbing joints to be used at outer edge of slab.
- Builder is to ensure that the foundation material beneath footings and edge beams can provide a safe bearing pressure of 100 kPa minimum unless noted otherwise.
- Masonry articulation joints shown on plan are in approximate locations only and should be aligned with the sides of windows and doors. Joints are to run through the full height of the masonry wall.
- Enquires should be directed to local authorities, water boards, councils etc. as to location of sewers, drains or other possible underground services/structures/excavations in the vicinity of the proposed building including adjoining properties.
- The owners should be advised of general foundation maintenance requirements as outlined in AS 2870 Appendix B and CSIRO document "Guide to Home Owners on Foundation Maintenance and Footing Performance".
- A 1000 mm wide concrete path should be constructed around the perimeter of the building to drain surface water away from the building.

STRUCTURAL STEELWORK NOTES

- All workmanship and materials shall be in accordance with AS 4100.
- All hot rolled sections are to be grade 300 plus.
- All structural hollow sections are to be grade 450 MPa.
- Welding shall be performed by an experienced operator in accordance with AS 1554, inspected and certified by a qualified person as described in AS 2214.
- The bolting procedures and type of : 4.6/S, 8.8/S, 8.8/TF and 8.8/TB are to be in accordance with AS 1111 and AS 1252.
- The Contractor shall provide and leave in place until permanent bracing elements are constructed such temporary bracing as is necessary to stabilise the structure.
- Painting, as specified by the Principal, shall be in accordance with AS 2312, to suit site exposure conditions.
- Except where otherwise shown, welds are to be 6 mm (minimum) continuous fillet welds. All welds are to be structural purpose U.N.O.
- Unless otherwise shown, provide single line of bolts cleated connections. 10 mm cleat plate, 6 mm continuous fillet weld and M20 8.8/S bolts. Provide 2 No. bolts to members 200 mm deep & less. Bolts to all other members shall be in accordance with : A.I.S.C. Standardized Structural Connections.

NOTE RE : STRUCTURAL STEEL GALVANISING

ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANISED IN ACCORDANCE WITH AS/NZS 4680 WITH A MINIMUM ZINC MASS OF 600 g/m² (85 MICRON). ALL GALVANISING DRAIN HOLES ARE TO BE PLUGGED WITH SILICONE SEALANT

ALL SITE WELDING TO GALVANISED STEELWORK SHALL HAVE TWO COATS OF ORGANIC ZINC RICH PAINT AT 50 MICRON (APPROX 350 g/m²) IN ACCORDANCE WITH AS/NZS 3750.9

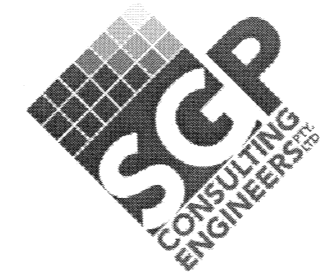
ALL COLUMNS AND BASE PLATES IN CONTACT WITH THE GROUND ARE TO HAVE A BARRIER COATING APPLIED TO MANUFACTURERS SPECIFICATION (eg. 85 MICRON OR 600 g/m² H.D. GAL OR APPROVED EQUIVALENT)

TIMBER SPECIFICATION

- All framing, connections and materials to be in accordance with AS 1720 and AS 1684.
- All timber to be to the stress grades nominated. All timber sizes shown are finished sizes.
- Contractor to ensure all work carried out to these specifications and that no spans or sizes to vary.
- No substitutions or splices are permitted without the Engineers' written consent.
- All exposed bolts, fixings etc., to be hot dip galvanized in accordance with AS 1650 to suit site exposure conditions.
- All timber to be seasoned unless noted otherwise.
- All timber to be protected and preservative treated to Architect's specification to suit site conditions.
- All bolts are to be engineering grade and are to be retightened after any timber shrinkage or movement.

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John Greiner 12.09.2016

TITLE
FOOTING AND SLAB NOTES

PROJECT
PROPOSED RESIDENCE FOR
COLE AND LANGLEY AT LOT 6,
41A POPES ROAD, JUNORTOWN

| | |
|----------|--------------------|
| SCALE | NTS (A2) |
| DATE | SEPTEMBER 2016 |
| DESIGNED | JKG |
| DRAWN | VJF |
| DWG. No. | 15-5086-S08 (of 8) |